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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
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08/579,733 12/28/95 NOBUTA

H 862.1351

EXAMINER	
WALLERSON, M	

ART UNIT	PAPER NUMBER
2722	7

DATE MAILED:

02/25/98

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

Office Action Summary	Application No. 08/579,733	Applicant(s) Hiroshi Nobuta
	Examiner Mark Wallerson	Group Art Unit 2722
		

Responsive to communication(s) filed on Dec 9, 1997

This action is **FINAL**.

Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

A shortened statutory period for response to this action is set to expire 3 month(s), or thirty days, whichever is longer, from the mailing date of this communication. Failure to respond within the period for response will cause the application to become abandoned. (35 U.S.C. § 133). Extensions of time may be obtained under the provisions of 37 CFR 1.136(a).

Disposition of Claims

Claim(s) 1-56 is/are pending in the application.

Of the above, claim(s) 9, 15, 22, 25, 28, and 30-56 is/are withdrawn from consideration.

Claim(s) _____ is/are allowed.

Claim(s) 1-8, 10-14, 16-21, 23, 24, 26, 27, and 29 is/are rejected.

Claim(s) _____ is/are objected to.

Claims _____ are subject to restriction or election requirement.

Application Papers

See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.

The drawing(s) filed on _____ is/are objected to by the Examiner.

The proposed drawing correction, filed on _____ is approved disapproved.

The specification is objected to by the Examiner.

The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119

Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).

All Some* None of the CERTIFIED copies of the priority documents have been

received.

received in Application No. (Series Code/Serial Number) _____.

received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

*Certified copies not received: _____.

Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

Attachment(s)

Notice of References Cited, PTO-892

Information Disclosure Statement(s), PTO-1449, Paper No(s). _____

Interview Summary, PTO-413

Notice of Draftsperson's Patent Drawing Review, PTO-948

Notice of Informal Patent Application, PTO-152

--- SEE OFFICE ACTION ON THE FOLLOWING PAGES ---

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Part III DETAILED ACTION

Notice to Applicant(s)

1. This action is responsive to the following communications: amendment filed on 12/9/97.

2. This application has been reconsidered. Claims 1-8, 10-14, 16-21, 23, 24, 26, 27, and 29 are pending.

Response to Amendment

3. Applicant's arguments with respect to claims 1-8, 10-14, 16-21, 23, 24, 26, 27, and 29 have been considered but are deemed to be moot in view of the new grounds of rejection.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1, 2, 3, 4, 17, 18, 19, 20, and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kawamata et. al. (Kawamata) (U. S. 4,989,163) in view of Bushaw et. al. (U. S. 4,454,575).

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With regard to claims 1, 4, 17, and 20, Kawamata discloses a photo printer system comprising a scanner which generates an image (column 3, lines 48-58); a bus to which the scanned image is supplied (figure 1); a CPU (control unit for accessing the bus (figure 1, part 18), and a first bi-directional interface for receiving an image from a computer (figure 1, part 17). Kawamata also discloses that the data read out from the image scanner is stored in the memory of the printer controller and then sent to the computer (column 3, lines 50-58) Although Kawamata discloses that a low speed bi-directional interface may be used to effect communications between a computer and a printer (column 1, lines 56-63), he does not expound on this technology. Bushaw discloses a document distribution system in which a scanner and printer are connected along with a CPU to a bus, whereby when status information is transmitted to the CPU by the scanner and printer when requested by the CPU (column 11, lines 55-68 to column 12, lines 1-8). It would have been obvious to one of ordinary skill in the art at the time of the invention to utilize the method of determining a status of the printer and scanner as taught by Bushaw in the device of Kawamata in order to expedite the printing and scanning process and determine errors at the scanner and printer.

With regard to claims 2 and 18, Kawamata discloses a printer is arranged outside of the device and separate from the scanner (figure 4).

With regard to claims 3 and 19, Bushaw discloses an integrated scanner/printer system (figure 1, part 12c).

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With respect to claim 21, Kawamata discloses that the image signal can be transferred from the bus to the printer without using the computer (column 3, lines 48-58).

6. Claims 24 and 27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kawamata in view of Otani et. al. (Otani) (U. S. 4,727,435).

With respect to claims 24 and 27, Kawamata discloses inputting and processing an image signal by using a developing circuit (internal circuit) (column 4, lines 64-69 and column 5, lines 19-34); transmitting the image signal from the scanner to the host computer (column 3, lines 48-53); outputting the image signal in a first mode to the printer using the developing circuit and the scanner, without use of the computer (column 4, lines 46-51), and outputting the image signal in a second mode using the computer (column 3, lines 48-58; column 5, lines 31-68 to column 6, lines 1-15 and column 7, lines 30-47). Kawamata differs from claims 24 and 27 in that he does not clearly disclose a plurality of modes to process and output the image signal. Otani discloses a plurality of modes to process and output the image signal (column 1, lines 66-68 to column 2, lines 1-10 and column 4, lines 5-20). It would have been obvious to one of ordinary skill in the art at the time of the invention to utilize the image processing modes as taught by Otani in the apparatus of Kawamata in order to improve image processing.

7. Claims 13 and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kawamata in view of Bushaw as applied to claim 4 above, and further in view of Otani.

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With regard to claim 13, Kawamata and Bushaw disclose the subject matter discussed above in regards to claim 4. Kawamata and Bushaw differ from claim 13 in that they are silent on photoelectric conversion means. Otani discloses a scanner comprising a photoelectric conversion unit for converting an optical signal to an electrical signal and processing the resultant image. It would have been obvious to one of ordinary skill in the art to utilize the photo electrical means as taught by Otani in the apparatus of Kawamata in view of Bushaw in order to read the optical signals.

With respect to claim 14, Kawamata discloses that the image signal can be transferred from the bus to the printer without using the computer (column 3, lines 48-58).

8. Claims 16, 23, 26, and 29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kawamata in view of Bushaw as applied to claims 1 and 17 above, and further in view of Kochis et. al. (Kochis) (U. S. 5,218,458).

Kawamata and Bushaw disclose the subject matter discussed above in regards to claims 1 and 17. Kawamata and Bushaw differ from claim 16, 23, 26, and 29 in that they do not disclose a modem or transmitting the image from the bidirectional interface to a telephone line. Kochis discloses a telephone line connected to a PC Fax card for the transmission of the image signal. It would have been obvious to one of ordinary skill in the art at the time of the invention to utilize a modem as taught by Kochis in the device of Kawamata in view of Bushaw in order to easily transmit the image data.

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9. Claims 5 and 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kawamata in view of Bushaw as applied to claims 1 and 17 above, and further in view of Takaoka et. al. (Takaoka) (U. S. 5,438,648).

With regard to claim 5, Kawamata and Bushaw disclose the subject matter discussed above in regards to claims 1 and 17. Kawamata and Bushaw differ from claim 5 in that they do not disclose color balancing and conversion means for converting a color image signal from a signal processed by a computer to a color image signal unique to a printer. Takaoka discloses color balancing and conversion means for converting a color image signal from a signal processed by a computer to a color image signal unique to a printer (column 2, lines 65-68 to column 3, lines 1-32). It would have been obvious to one of ordinary skill in the art at the time of the invention to utilize the image balancing and conversion means as taught by Takaoka in the device of Kawamata in view of Bushaw in order to improve color image processing of the graphic signals.

With regard to claim 6, Takaoka discloses that the color signal from the scanner includes R, G, and B signals, and color balancing is performed by adjusting the intensities of the R, G, and B signals (column 3, lines 6-35 and column 4, lines 22-26). It would have been obvious to one of ordinary skill in the art at the time of the invention to utilize the density adjusting means as taught by Takaoka in the device of Kawamata in view of Bushaw in order to improve the output image.

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10. Claims 7 and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kawamata in view of Bushaw as applied to claim 4 above, and further in view of Murai (U. S. 4,962,421).

With respect to claim 7, Kawamata and Bushaw disclose the subject matter discussed in regards to claim 4 above. Kawamata and Bushaw differ from claim 7 in that they do not disclose that the image processing means includes the process of controlling the resolution of the image read from the scanner. Murai discloses image processing means which include the process of controlling the resolution of the image read from the scanner (column 7, lines 1-13). It would have been obvious to one of ordinary skill in the art at the time of the invention to utilize the resolution control means as taught by Murai in the device of Kawamata in view of Bushaw in order to improve the output image.

With regard to claim 8, Kawamata and Bushaw do not disclose image processing means for controlling the magnification of the scanned image. Murai discloses image processing means for controlling the magnification of the scanned image (column 6, lines 56-68). It would have been obvious to one of ordinary skill in the art at the time of the invention to utilize the resolution control means as taught by Murai in the device of Kawamata in view of Bushaw in order to improve the output image.

11. Claims 10, 11, and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kawamata in view of Bushaw as applied to claim 4 above, and further in view of Oura (U. S. 4,470,113).

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With respect to claims 10, 11, and 12, Kawamata and Bushaw disclose the subject matter discussed in regards to claim 4 above. Kawamata and Bushaw differ from claims 10, 11, and 12 in that they do not disclose memory means for recording set values used for image processing by the host computer, wherein the set values include values determined in accordance with the scanner and the printer. Oura discloses memory means for recording set values used for image processing by the host computer, wherein the set values include values determined in accordance with the scanner and the printer (column 7, lines 25-43). It would have been obvious to one of ordinary skill in the art at the time of the invention to utilize the value setting means as taught by Oura in the device of Kawamata in view of Bushaw in order to improve the image processing.

Conclusion

12. All claims are rejected.
13. The prior arts made of record and not relied upon are considered pertinent to applicant's disclosure.

U. S. Patent 5,418,904 is cited as it discloses an image forming system with plural optional units connected to a serial communications line.

U. S. Patent 5,666,558 is cited as it discloses bidirectional parallel protocol

U. S. Patent 5,537,626 is cited as it discloses an apparatus for coupling a printer with a LAN.

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14. Applicant's amendment necessitated the new grounds of rejection. Accordingly, **THIS ACTION IS MADE FINAL**. See M.P.E.P. § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 C.F.R. § 1.136(a).

A SHORTENED STATUTORY PERIOD FOR RESPONSE TO THIS FINAL ACTION IS SET TO EXPIRE THREE MONTHS FROM THE DATE OF THIS ACTION. IN THE EVENT A FIRST RESPONSE IS FILED WITHIN TWO MONTHS OF THE MAILING DATE OF THIS FINAL ACTION AND THE ADVISORY ACTION IS NOT MAILED UNTIL AFTER THE END OF THE THREE-MONTH SHORTENED STATUTORY PERIOD, THEN THE SHORTENED STATUTORY PERIOD WILL EXPIRE ON THE DATE THE ADVISORY ACTION IS MAILED, AND ANY EXTENSION FEE PURSUANT TO 37 C.F.R. § 1.136(a) WILL BE CALCULATED FROM THE MAILING DATE OF THE ADVISORY ACTION. IN NO EVENT WILL THE STATUTORY PERIOD FOR RESPONSE EXPIRE LATER THAN SIX MONTHS FROM THE DATE OF THIS FINAL ACTION.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mark Wallerson whose telephone number is (703) 305-8581.

Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is (703) 305-4700.

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks
Washington, DC 20231

or faxed to:

(703) 308-9051 (for formal communications intended for entry)

(703) 308-5397 (for informal or draft communications, such as proposed amendments to be discussed at an interview; please label such communications "PROPOSED" or "DRAFT")

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or hand-carried to:

Crystal Park Two
2121 Crystal Drive
Arlington, VA.
Sixth Floor (Receptionist)

IMPORTANT NOTICE

Effective November 16, 1997, the Examiner handling this application will be assigned to a new Art Unit as a result of the consolidation into Technology Center 2700. See the forth coming Official Gazette notice dated November 11, 1997. For any written or facsimile communication submitted **ON OR AFTER** November 16, 1997, this Examiner, who was assigned to Art Unit **2612**, will be assigned to Art Unit **2722**. Please include the new Art Unit in the caption or heading of any communication submitted after the November 16, 1997 date. Your cooperation in this matter will assist in the timely processing of the submission and is appreciated by the Office.

MARK WALLERSON
PATENT EXAMINER 

Mark Wallerson


EDWARD COLES, SR.
SUPERVISORY PATENT EXAMINER
ART UNIT 2616